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October 1964

PHOTOGRAPHIC INTERPRETATION REPORT

**MISSILE, RADARS,
AND ASSOCIATED EQUIPMENT,
MYS SET-NAVOLOK SAM SITE, USSR
MAY-JUNE 1964**



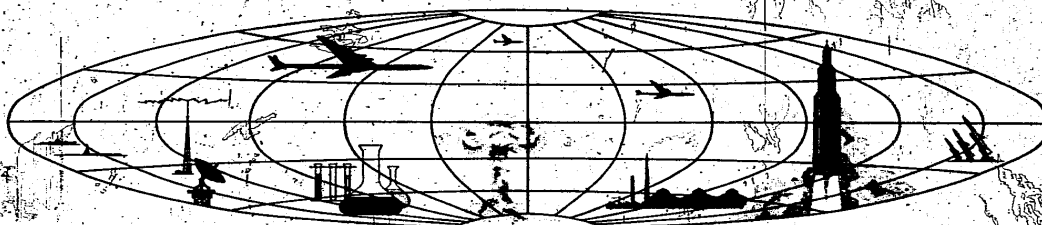
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Declassification review by NIMA/DOD



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MISSILE, RADARS, AND ASSOCIATED EQUIPMENT,
MYS SET-NAVOLOK SAM SITE, USSR, MAY-JUNE 1964

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This report has been prepared in response to CIA requirement C-S14-81,661 requesting as complete a mensuration and interpretation as possible of the missile, launcher, transporter, guidance van, and radars at Mys Set-Navolok SAM Site as observed on small-format photographs of [REDACTED] furnished by the requester. In addition to these, other small-format photographs, dated [REDACTED] have been used in the preparation of the report.

The measurements which could be made are [REDACTED]

25X1D
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MISSILE, LAUNCHER, AND TRANSPORTER

The missile appears to be 2-stage and has 3 sets of fins. It is mounted on a launcher that has twin mounts, each of which has a flame deflector that can be folded up onto the launcher.

The launcher can rotate on its base 360 degrees and is transportable in that it can be placed on bogie wheels and towed. Measurements of the missile and launcher are provided in Figure 2.

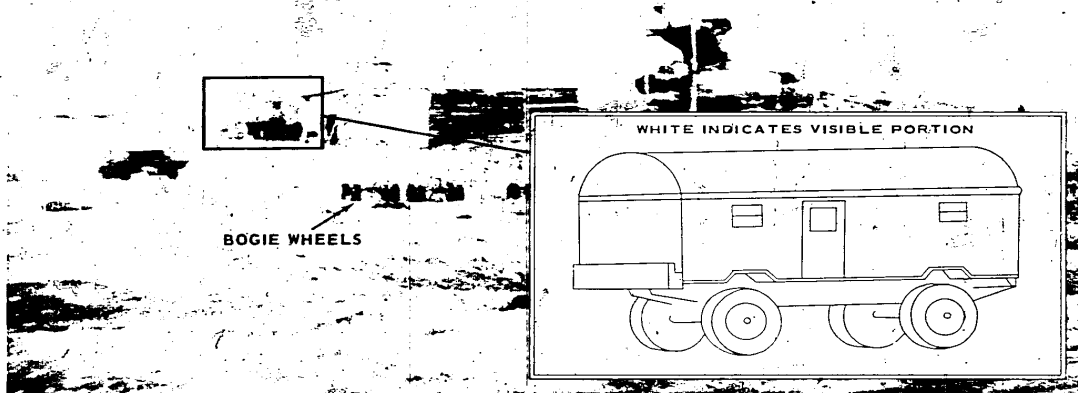


FIGURE 1. GUIDANCE VAN TRAILER, [REDACTED]

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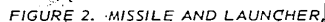
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truck that has been altered by the mounting of twin racks for missiles behind the cab. The guidance van which was observed is shown in Figure 1.

RADARS

and masts are on the hill but near an old coastal gun battery, suggesting they may be associated with it rather than with the SAM site.

One of the surveillance/acquisition radars (Figure 6) consists of 2 parabolic or "orange-peel" reflectors stacked one above the other



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FIGURE 3. MISSILE TRANSPORTER

and having a waveguide-type feed. One photograph (Figure 6) shows the radar to be van mounted, and another (Figure 7) shows it to be shed mounted (although in the latter the radar

may be mounted on a van behind a shed). The radar is rotatable, but the reflectors have not been observed fully broadside; accordingly, no attempt has been made to measure their length. The ground falls away from the radar on all sides, indicating that it may be primarily for low-altitude acquisition. The other surveillance/acquisition radar (Figure 7) consists of a long, rather clumsy-appearing boom, which supports vertical ribs, which presumably in turn support the active or driven antenna elements; indistinct imagery precludes observation of details.

The possible IFF antenna (Figure 8) is located near the old coastal gun battery and appears to consist of 2 folded dipoles in front of a rectangular reflector; indistinct imagery again precludes observation of details.

The SAM guidance radar (Figures 9 and 10) consists of 4 antennas apparently arranged in pairs (Figure 10). Two consist of parabolic sections or dishes with rectangular outlines and

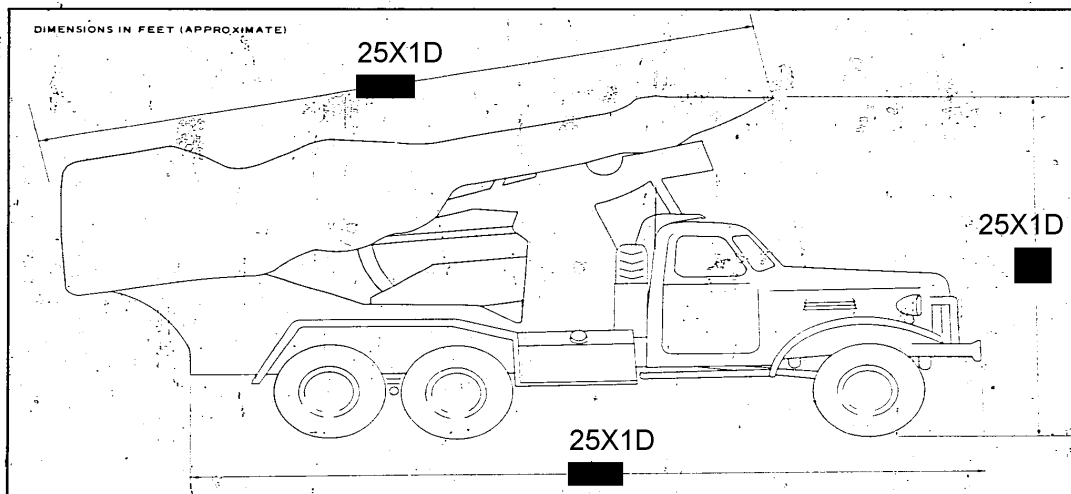


FIGURE 4. CONCEPT OF MISSILE TRANSPORTER

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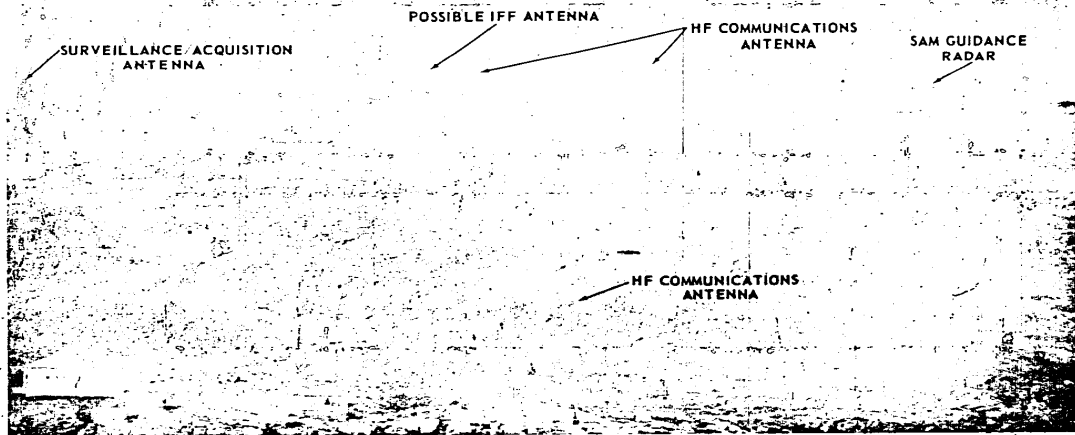


FIGURE 5. RADAR AND COMMUNICATIONS ANTENNAS.

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have waveguide feeds. The other [REDACTED] appear to be troughs. The latter can be tilted and rotated, but appear always to form a right angle to each other. The independent movement of the antennas apparently can unbalance the radar set, as indicated by individually adjustable counterweights near the bottom. The radar as seen in separate photographs (Figure 9) presents a confusing appearance, i.e., the number of antennas appears to be more and less than 4; this is caused by the

change of perspective resulting from the horizontal rotation and tilting of the radar.

The 2 HF communications antennas consist of horizontal-wire dipoles. A transmission line drops from the center or near-center of each wire into a small communications hut. The other poles and masts in the area suggest the presence of more of these and other types of communications antennas.

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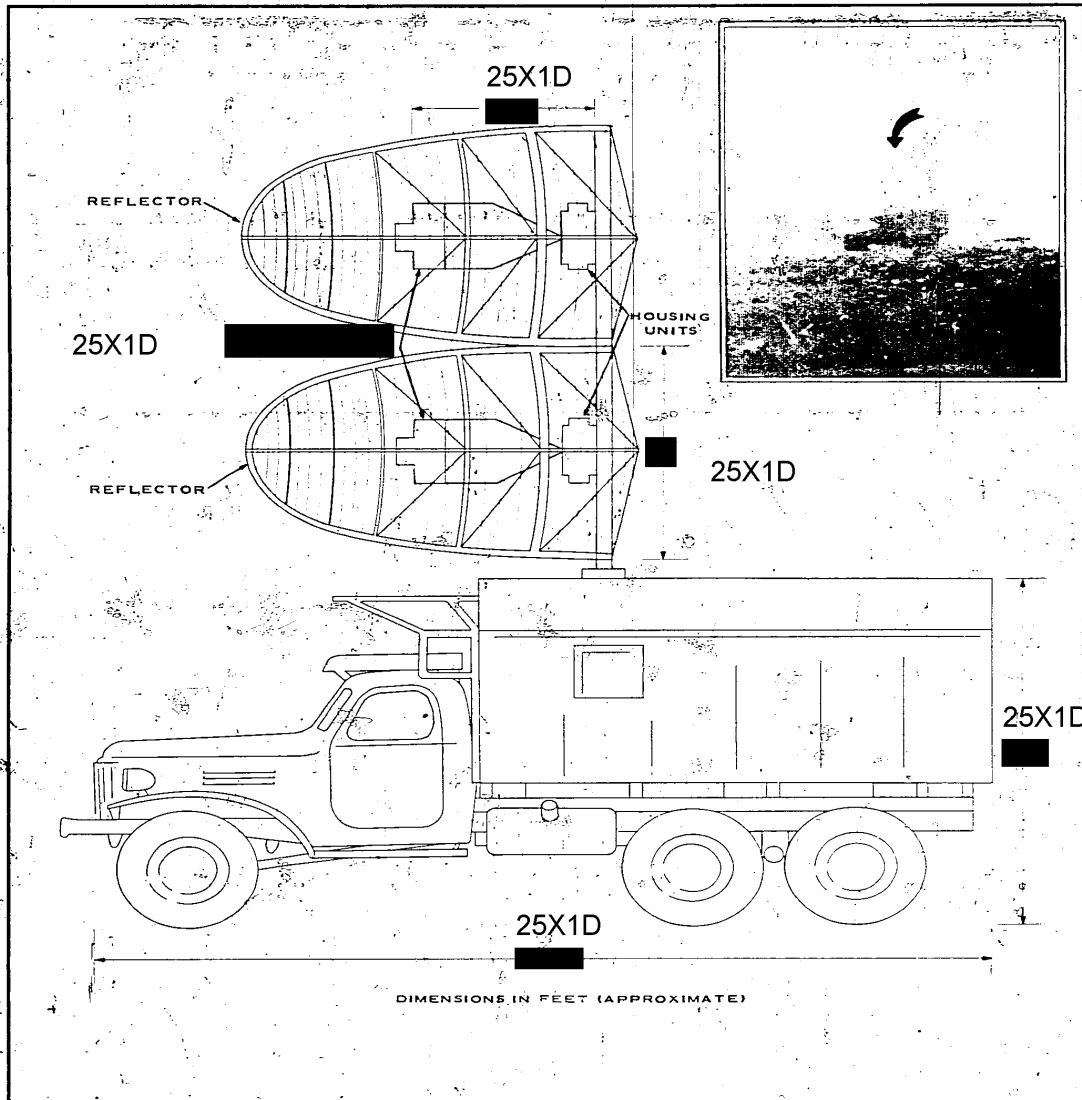


FIGURE 6. SURVEILLANCE ACQUISITION RADAR ANTENNA ON VAN, [REDACTED]

NPIC J-4228 (10/64)

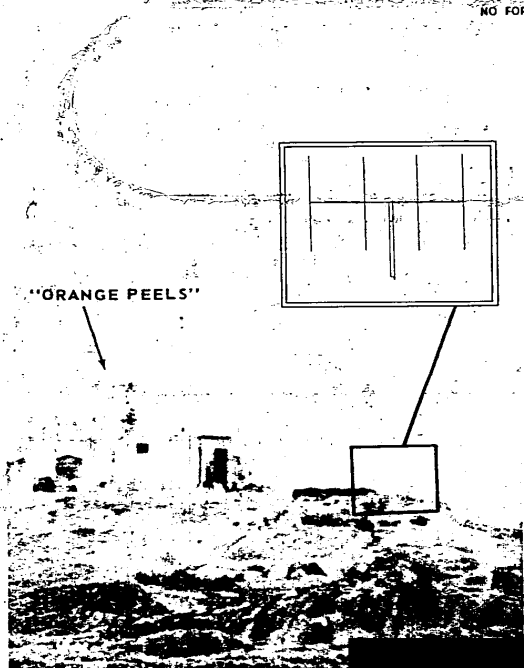
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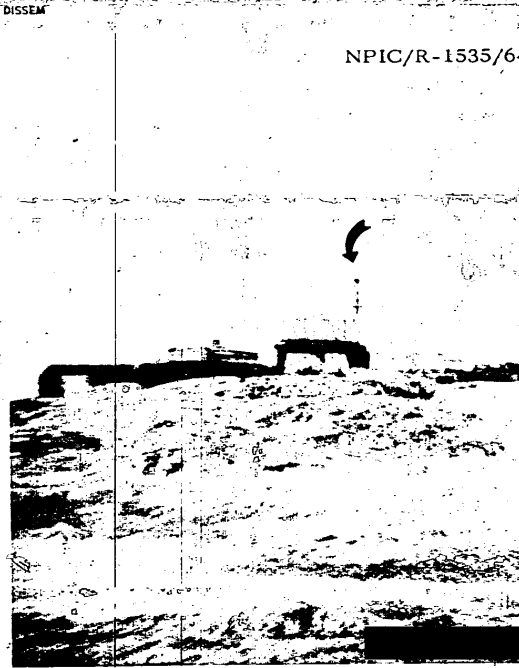


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FIGURE 7. SURVEILLANCE/ACQUISITION RADAR ANTENNAS,

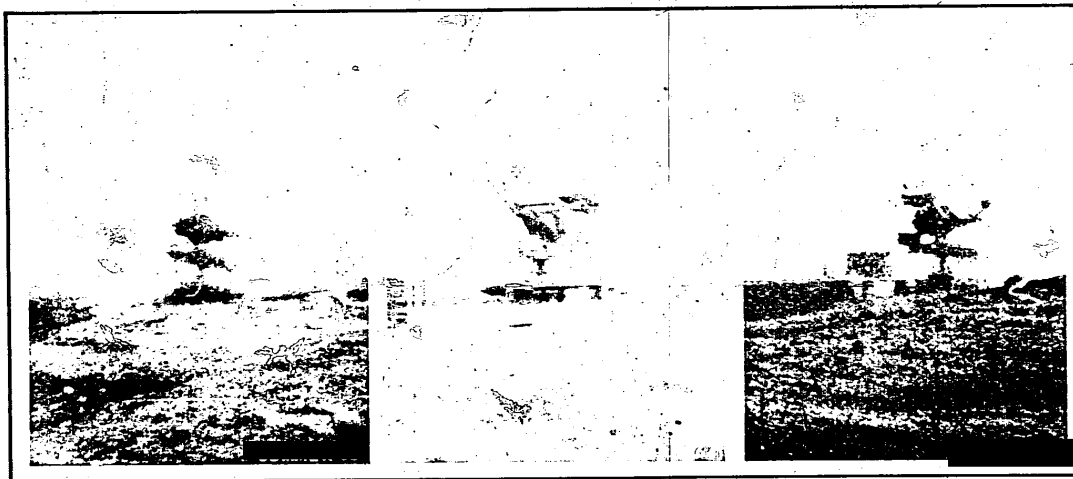


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FIGURE 8. POSSIBLE IFF ANTENNA,

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FIGURE 9. SAM GUIDANCE RADAR, MYS SET-NAVOLOK SAM SITE.

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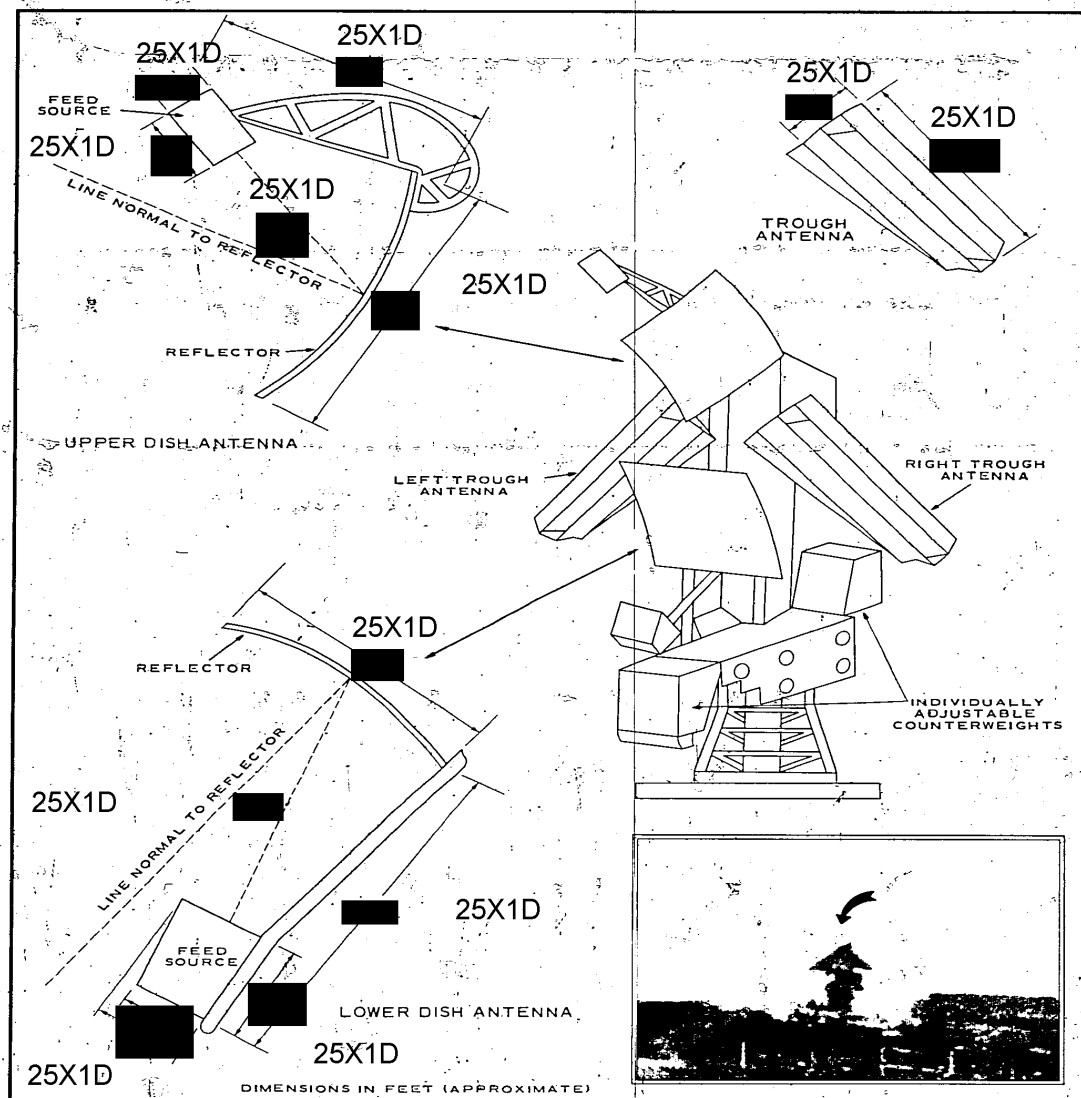


FIGURE 10. CONCEPT OF ANTENNAS OF SAM GUIDANCE RADAR.

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REFERENCES

PHOTOGRAPHY

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REQUIREMENT

CIA. C-514-81,661

NPIC PROJECT

N-546/64

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